

**DECLARATION OF
CHRISTOPHER THOMPSON**

**Redacted Version
of Document Sought
to be Sealed**

Mark C. Mao, CA Bar No. 236165
 Beko Reblitz-Richardson, CA Bar No. 238027
 Erika Nyborg-Burch, CA Bar No. 342125
BOIES SCHILLER FLEXNER LLP
 44 Montgomery St., 41st Floor
 San Francisco, CA 94104
 Tel.: (415) 293-6800
 mmao@bsflfp.com
 brichardson@bsflfp.com
 enyborg-burch@bsflfp.com

James Lee (admitted *pro hac vice*)
 Rossana Baeza (admitted *pro hac vice*)
BOIES SCHILLER FLEXNER LLP
 100 SE 2nd St., 28th Floor
 Miami, FL 33131
 Tel.: (305) 539-8400
 jlee@bsflfp.com
 rbaeza@bsflfp.com

Amanda K. Bonn, CA Bar No. 270891
SUSMAN GODFREY L.L.P.
 1900 Avenue of the Stars, Suite 1400
 Los Angeles, CA 90067
 Tel: (310) 789-3100
 Fax: (310) 789-3150
 abonn@susmangodfrey.com

Attorneys for Plaintiffs

**UNITED STATES DISTRICT COURT
 NORTHERN DISTRICT OF CALIFORNIA**

CHASOM BROWN, WILLIAM BYATT,
 JEREMY DAVIS, CHRISTOPHER
 CASTILLO, and MONIQUE TRUJILLO
 individually and on behalf of all similarly
 situated,

Plaintiffs,

vs.

GOOGLE LLC,

Defendant.

William Christopher Carmody
 (admitted *pro hac vice*)
 Shawn J. Rabin (admitted *pro hac vice*)
 Steven M. Shepard (admitted *pro hac vice*)
 Alexander Frawley (admitted *pro hac vice*)
SUSMAN GODFREY L.L.P.
 1301 Avenue of the Americas,
 32nd Floor
 New York, NY 10019
 Tel.: (212) 336-8330
 bcarmody@susmangodfrey.com
 srabin@susmangodfrey.com
 ssh Shepard@susmangodfrey.com
 afrawley@susmangodfrey.com

John A. Yanchunis (admitted *pro hac vice*)
 Ryan J. McGee (admitted *pro hac vice*)
MORGAN & MORGAN
 201 N. Franklin Street, 7th Floor
 Tampa, FL 33602
 Tel.: (813) 223-5505
 jyanchunis@forthepeople.com
 mram@forthepeople.com
 rmcgee@forthepeople.com

Michael F. Ram, CA Bar No. 104805
MORGAN & MORGAN
 711 Van Ness Ave, Suite 500
 San Francisco, CA 94102
 Tel: (415) 358-6913
 mram@forthepeople.com

Case No.: 4:20-cv-03664-YGR-SVK

**DECLARATION OF CHRISTOPHER
 THOMPSON IN SUPPORT OF
 PLAINTIFFS' RESPONSE TO
 GOOGLE'S OBJECTIONS TO THE
 SPECIAL MASTER'S RECOMMENDED
 PRESERVATION PLAN**

Referral: The Honorable Susan van Keulen

DECLARATION OF CHRISTOPHER THOMPSON

I, Christopher Thompson, declare as follows.

1. Counsel for the *Brown* Plaintiffs retained me to provide technical analysis and testimony in connection with the preservation plan recommended by Special Master Brush and the parties' objections to that plan.

2. All of the statements in this declaration are true based on my analysis and personal knowledge, and I am available and willing to testify at the scheduled May 3, 2021 hearing.

3. A copy of my CV was previously filed at Dkt. 536-9. As reflected in my CV, I majored in Computer Engineering and have many years of experience in computing technology. I am being compensated at a rate of \$275 per hour for my work in connection with this matter, and none of my compensation is contingent on the outcome of this litigation.

4. I have reviewed each and every submission that Google and the Special Master made available as part of the Special Master process, including the Plaintiffs' data, test data, schema produced by Google, and the transcripts of the hearings before the Special Master. In addition, all documents Google produced and deposition transcripts for witnesses in this case have been made available to me pursuant to the Protective Order.

5. I understand that Google has suggested within its Objections to the Special Master's preservation order (Dkt. 544) that Google will only preserve aggregated dashboard data from the [REDACTED] logs that contain the `is_chrome_incognito` and `is_chrome_non_incognito` detection bits.

6. To be clear, I am referring to the following [REDACTED] [REDACTED] logs, organized below by which incognito-detection bit is present within which log.

- `is_chrome_non_incognito`

1. [REDACTED]

[REDACTED]

[REDACTED]

- `is_chrome_incognito`

1 4. [REDACTED]

2 [REDACTED]
3 Dkt. 511-3, Ex. 2 to Supplemental Declaration of Mark Mao in Support of Plaintiffs' Sanctions
4 Motion.

5 7. Plaintiffs asked me to submit this declaration in support of their argument that
6 Google should be required to preserve event-level data from these [REDACTED] logs.

7 8. As the Court is aware, on April 1, 2022, Google produced a proto comment for the
8 is_chrome_incognito bit, which confirms that the field "Represents if an entry comes from a
9 Chrome web browser in the incognito mode." Dkt. 536-2, Plaintiffs' Sanctions Reply Ex. 1.

10 9. On April 22, 2022—the day after the April 21, 2022 evidentiary hearing on
11 Plaintiffs' sanctions motion, Google through the Special Master process produced data associated
12 with [REDACTED] events. I worked with Dr. Lillian Dai, another of Plaintiffs' consultants, to review
13 this data.

14 10. This April 22 production marked the first time that Plaintiffs received any data from
15 any of the [REDACTED] logs. The data that Google produced on April 22 came from one of the
16 [REDACTED] logs that contain the is_chrome_incognito bit, namely, [REDACTED]. Google
17 provided the search script, but Google appears to have omitted [REDACTED] of the other [REDACTED] logs. I
18 understand Plaintiffs are addressing this issue through the Special Master process.

19 11. From my analysis of this data, I have determined that (A) the is_chrome_incognito
20 bit detected Incognito browsing data for this April 22 production with 100% accuracy, (B) signed-
21 out, Incognito browsing data from this production (which consists of Google Search queries) can
22 be correlated with signed-out, Incognito browsing data on non-Google websites from other Google
23 productions, and (C) signed-out, Incognito browsing data from this production can be correlated
24 with GAIA-keyed browsing data from other Google productions. It is also my opinion that (D)
25 Google has not demonstrated that its proposal to preserve only [REDACTED] dashboard data would be
26 sufficient for purposes identifying class members. Plaintiffs still do not have any documentation
27 from Google regarding the [REDACTED] logs.
28

1 *A) The is_chrome_incognito Bit Accurately Detected Incognito Traffic*

2 12. The data that Google produced on April 22 was associated with a set of Zwieback
3 IDs. These Zwieback IDs are associated with Zwieback cookies submitted as a part of the Second
4 Iterative Search in the Special Master process. The Zwieback cookie to ID mappings were
5 produced by Google.¹

6 13. To analyze the data and determine whether the is_chrome_incognito bit accurately
7 detected Incognito traffic, I referenced data captures recorded at the time of the actual browsing
8 sessions, which contain the Zwieback cookies. These data captures have already been provided to
9 Google as Exhibit F of the April 15, 2022 Expert Report of Jonathan Hochman. Referencing those
10 data captures, and using the Zwieback cookie to ID mappings provided by Google, I determined
11 that for all 11 events produced on April 22, the “is_chrome_incognito” bit accurately detected
12 whether the browsing session was Incognito.

13 *B) Incognito Search Data from the April 22 Production Can be Correlated with Previously*
14 *Produced Signed-out Incognito Browsing Data on Non-Google Websites*

15 14. Google’s April 22 production was limited to the time period April 13, 2022, through
16 April 19, 2022. Google did not produce any GAIA (signed-in) or Biscotti (signed-out, Display ads
17 data) for the same time period.

18 15. In any event, as one example, I was able to locate a combination of IP address and
19 user agent information in the [REDACTED] data produced on April 22 and correlate that signed-out,
20 Incognito data with previously produced, signed-out Incognito browsing data from visits to non-
21 Google websites.

22 16. The [REDACTED] data produced on April 22 contained the same combination of IP
23 address and user agent discussed in my declaration filed with Plaintiffs’ Reply in support of their
24 Sanctions Motion (Dkt. 536-8). That combination was also found in many signed-out Biscotti logs.
25 Dkt. 536-8 ¶¶ 10-12. Furthermore, the “maybe_chrome_incognito” bit² identifies the
26 corresponding Biscotti ID as from Incognito mode. *Id.*

27 ¹ 2022-03-04 Brown v. Google - Second Iterative Searches - Decrypted NIDs.xlsx

28 ² 2022-03-04 Brown v. Google - Live [REDACTED] Queries.xlsx

1 *C) Incognito Search Data from the April 22 Production Can be Correlated with Previously*
 2 *Produced Signed-in (GAIA-Keyed) Browsing Activity*

3 17. I also performed a similar analysis to correlate the [REDACTED] data produced on April
 4 22 with signed-in (GAIA-keyed) browsing data. The same combination of IP address and user
 5 agent values discussed above can be found in a GAIA log produced during the First Iterative
 6 Search for the Special Master process: [REDACTED]
 7 [REDACTED],” which is associated with consultant Dr.
 8 Dai’s GAIA account. Dkt. 536-8 ¶¶ 10-12.

9 18. The upshot is as follows: Google’s April 22 production suggests that the
 10 is_chrome_incognito bit accurately detects Incognito browsing data reflecting Google searches,
 11 and this data can be correlated with previously produced data from visits to non-Google websites
 12 within Incognito mode, as well as GAIA-keyed data.

13 *D) [REDACTED] Dashboard Data Is Insufficient*

14 19. If Google preserves data from the [REDACTED] logs for all class members, as well as
 15 Biscotti and GAIA data, the process I lay out above could be repeated for any class members.

16 20. But if Google’s proposal to preserve only aggregated dashboard data from the
 17 [REDACTED] logs were adopted, then one may not be able to repeat the above analysis for other class
 18 members’ data.

19 21. Google has not demonstrated that Dashboard data can be used to identify individual
 20 class members or specific events. At best, in terms of what Google has presented thus far,
 21 dashboard data may provide aggregated statistics, such as the portion of traffic over a given time
 22 for which is_chrome_incognito was equal to “true.” But that aggregated data would not help
 23 Plaintiffs detect particular instances of event-level Incognito browsing activity, which would in
 24 turn prevent Plaintiffs from attempting to link any such browsing data to class members’ GAIA
 25 accounts.

26 I declare under penalty of perjury under the laws of the United States of America that the
 27 foregoing is true and correct. Executed this 25th day of April, 2022, at Nolensville, Tennessee.

28 /s/ Christopher Thompson